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96-95

USWEST

Cyndie Eby Executive Director-Federal Regulatory

Written Ex Parte

JUL 2 5 1996

FEDERAL COMMUNICATIONS COMMISSIE

July 24, 1996

Mr. William F. Caton Acting Secretary Federal Communications Commission 1919 M Street, N.W., Room 222 Stop Code 1170 Washington, D.C. 20554

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OFFICE OF SECRECEIVED

CETE CARREST COLOR

Washington, D.C. 20004

RE: CC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996

Dear Mr. Caton:

Attached hereto are two copies of a letter that was sent to Mr. Elliott Maxwell, Deputy Chief of the Office of Plans and Policy. This submission was made at the request of Mr. Maxwell and therefore, pursuant to paragraph 291 of the NPRM released in the above-referenced proceeding on April 19, 1996, the submission does not count against U S WEST's page limit for ex parte filings made in this proceeding.

In accordance with Commission Rule 1.1206(a)(1), two copies of the letter are being filed with you for inclusion in the public record. Acknowledgement and date of receipt of this submission are requested. A copy of this transmittal letter is provided for this purpose. Please contact me if you have any questions.

Sincerely,

Attachments

cc: C. Anthony Bush

Mr. Patrick DeGraba

Mr. Juis Enriquez Mr. Joseph Farrell

Mr. Elliott Maxwell

Mr. Robert Pepper

Mr. Gregory Rosston

No. of Copies rec'd\_ List ABCDE

Mr. Les Selzer

Mr. Bill Sharkey

Mr. Brad Wimmer

u s WEST, Inc. Suite 700 1020 Nineteenth Street, NW Washington, DC 20036 202 429-3106 FAX 202 296-5157

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Cyndie Eby Executive Director-Federal Regulatory 16-38

#### **EX PARTE**

July 24, 1996

RECEIVED

Mr. Elliott Maxwell
Deputy Chief, Office of Plans and Policy
Federal Communications Commission
1919 M Street, N.W., Suite 822
Washington, D.C. 20554

Jul 2 5 1996

FEDERAL COMMERCIANT LANS COMMISSEED OF THE OFFICE AFTINGY

RE: CC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996

Dear Mr. Maxwell:

Per your request, U S WEST is providing more detail around information that was discussed at the recent meeting with you. Attachment A is a summary of the federal and state depreciation expense recorded by U S WEST Communications (USWC). The first column shows what USWC total depreciation expense would be if USWC used only FCC prescribed lives for the entire company (line 1) and the total depreciation expense if USWC used only state prescribed lives (line 2). The second and third columns show the impact on depreciation expense if USWC used economic lives, i.e. lives used for reporting its GAAP financial statements. These are the lives that best reflect the actual future lives of USWC assets.

The last three columns show the actual impact of using regulatory prescribed lives as booked in state and federal jurisdictions rather than GAAP reported lives.

#### This data demonstrates that:

- 1) USWC's state depreciation rates are significantly below even FCC mandated rates;
- 2) FCC mandated rates, if applied to the entire company, under-depreciate assets by over 13% annually;

No. of Copies rec'd\_ List ABCDE Mr. Elliott Maxwell July 24, 1996 Page 2

- 3) USWC's actual under-depreciation of \$498.4 M annually on its composite state and federal regulatory books represents an on-going under-depreciation of its assets of more than 18%; and
- 4) USWC actual embedded assets subject to regulatory jurisdictions have been significantly under-depreciated due to past regulatory actions.

This means that no matter what the FCC does in its interconnection order it must deal with under-depreciation of assets at both the federal and state jurisdictions. To do otherwise will encourage uneconomic results because of under-pricing at both the state and federal jurisdictions. TSLRIC plus shared and common pricing will give inappropriate results if depreciation lives used do not reflect true economic lives. But even using economic lives in TSLRIC fails to recover the prior under-depreciation amount which the Commission must address. Therefore, the Commission must mandate the use of economic lives in TSLRIC and allow for the recovery, on an interim basis, of prior under-depreciation.

Attachment B is the break-down of costs that U S WEST includes as shared cost. Attachment C is the break-down of costs that U S WEST includes as common cost. Attachment D provides a filing made in Colorado supporting the rationale for avoided costs in our resale rates. Section III A, page 4, discusses avoided costs for each type of cost included in USWC TSLRIC studies.

Should you have any questions concerning this information, please feel free to contact me.

Sincerely,

Lyndie Eby Attachments

cc: Mr. C. Anthony Bush

Mr. Patrick DeGraba Mr. Luis Enriquez

Mr. Joseph Farrell Mr. Robert Pepper Mr. Gregory Rosston

Mr. Les Selzer Mr. Bill Sharkey Mr. Brad Wimmer

#### **U S WEST Communications**

# Change in Regulated Depreciation at USWC Economic Lives Used for Financial Reporting Purposes (\$Millions)

Total

Actual

Depreciation

Additional

Depreciation Depreciation

Total

	for 1995	Lives	Lives	for 1995	Lives	Lives
CC Jurisdiction	Total	(Unseparated)	Basis	Interst	ate (Separated	) Basis
Depreciation Expense	<b>2,252</b> .5	384.0	<b>2,636</b> .5	630.7	98.8	729.5
State Jurisdiction	Total (Unseparated) Basis			Intrastate (Separated) Basis		
Depreciation Expense	2,112.7	550.3	<b>2,663</b> .0	1,521.1	399.6	1,920.7
í otal Regulated				Inte	erstate + Intras	tate
Depreciation Expense				2,151.8	498.4	2,650.2

#### Notes

Actual

Additional

Depreciation | Depreciation

<sup>1995</sup> FCC Unseparated Depreciation Expense from ARMIS 43-01 / 43-03.

<sup>1995</sup> State Unseparated Depreciation Expense from 12/31/95 SR-16 Report

Change in Accruals Based on 12/31/95 Investment & Reserve Data.

#### **COSTS INCLUDED IN SHARED COST**

#### A. EXPENSES THAT ARE 100% SHARED

- 1. ADMINISTRATIVE EXPENSES
  - CUSTOMER ACCOUNTING
  - CUSTOMER INSTRUCTION
  - SERVICE CENTER OPERATION
  - REGULATORY AND GOVERNMENT RELATIONS
  - UNCOLLECTIBLES
  - INFORMATION MANAGEMENT
  - COMPUTER OPERATIONS
- 2. LAND AND BUILDING

#### B. INVESTMENT RELATED EXPENSES

THE DEPRECIATION, COST OF CAPITAL, INCOME TAX, AD VALOREM TAX AND MAINTENANCE EXPENSES ASSOCIATED WITH THE FOLLOWING INVESTMENTS ARE INCLUDED IN SHARED COST

- 1. FIXED INVESTMENT PER SWITCH (i.e., GETTING STARTED COSTS)
- 2. SWITCH MODULARITY STANDBY CAPACITY
- 3. MODULARITY STANDBY CAPACITY IN FIBER CABLE BETWEEN WIRE CENTERS

#### C. EXPENSES RELATED TO REVENUES

THESE EXPENSES ARE CATEGORIZED AS SHARED IN THE SAME PROPORTION THAT THE SUM OF ALL <u>OTHER</u> COSTS ARE INCLUDED IN SHARED

- 1. GROSS RECEIPTS TAXES
- 2. STATE COMMISSION FEES

The following accounts are considered in the calculation of the Common Expense Factor, that is expenses that are considered common to the firm. A breakdown of each is provided below.

Expenses included in this factor are Annual Charges (Depreciation, Cost of Money, Income Taxes and Ad Valorem Taxes as appropriate) associated with:

- A. Inventories
- **B.** Furniture and Computers
- C. Motor Vehicle & Shop Equip.
- D. Land & Building

Account 6710 Executive & Planning Expense - The cost of providing executive direction and formulation policy at the presidential and vice presidential levels. Planning expenses are the costs of developing and evaluating major organizational plans and long range plans.

Account \$721 Accounting and Finance Expense - Cost of providing information for board of directors and owners meetings, performing all corporate financial transactions, managing the pension fund, issuing corporate securities. Corporate accounting expenses are those associated with performing payroll records, processing investment and cost records, preparation of corporate reports. General accounting expenses are those associated with defining, analyzing, forecasting and compiling accounting classifications, corporate financial reports, budget and taxes and other studies. Also included in this are instruction on accounting services functions.

Account 6722 External Relations Expense - This account shall include costs incurred in maintaining relations with government, regulators, other companies and the general public.

Account 6728 Human Resources Expense - This account shall include costs incurred in performing personnel administration activities. It includes Equal Employment Opportunity, and Affirmative Action Programs. Employee data for forecasting, planning and reporting, & general employment services.

Account 6725 Legal Expense - This account shall include the cost incurred in providing legal services. This includes conducting and coordinating litigation, providing guidance on regulatory and labor matters, preparing reviewing and filing patents and contracts and interpreting legislation.

Account 5727 Research and Development - This account shall include costs incurred in making planned search or critical investigations aimed at discovery of new knowledge. It also includes translating research findings into a plan or design for a new product or process or for a significant improvement to an existing product or service.

Account 5728 Other General & Administrative Expense - This account shall include costs incurred in performing general administrative activities not provided for in other accounts. This includes providing general reference libraries, food services, archives, general security investigation services, operating official private branch exchanges in the conduct of the business. Also included are payments in settlement of accidents and damage claims, insurance premiums for protection against losses and damages.

Account 6532 Network Operations Expense - This account shall include costs incurred in network administration. This includes such activities as controlling traffic flow, administering traffic measuring and monitoring devices, assigning equipment and load balancing, collecting and summarizing traffic data, administering trunking, and assigning interoffice facilities and circuit layout work.

Account 6534 Plant Operations Expense - This account shall include costs incurred in the general administration of plant operations. This includes supervising plant operations, planning, coordinating and monitoring plant operations; and performing staff work such as developing methods and procedures

Account 6535 Engineering Expense - This account shall include costs incurred in the general engineering of the telecommunications plant which are not directly chargeable to an undertaking or project. This includes developing input to the fundamental planning process, performing preliminary work or advance planning in connection with potential undertaking, and performing special studies of an engineering nature.

Account 8113 Aircraft Expense - This account shall include such costs as aircraft fuel, flight crews, mechanics and ground crews, licenses and inepection fees, washing, repainting, and minor accessories such as oil, tires and tubes.

COMMUNICATIONS (C)

# EXECUTIVE SUMMARY U S WEST

AVOIDED RESALE COSTS

1996 COST SUPPORT

**JULY 1996** 



Market Services And Economic Analysis Organization

# AVOIDED RESALE COST STUDY 1996

### Table of Contents

Section	Topic	Page
I.	PURPOSE, SCOPE, AND APPLICATION	2
II.	DESCRIPTION OF SERVICE	2
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IV.	DESCRIPTION OF TSLRIC	13
V.	STUDY ASSUMPTIONS	14
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#### L PURPOSE, SCOPE, AND APPLICATION

The purpose of this study is to calculate discount rates to be applied to retail prices when services are offered on a wholesale basis to resellers. A separate discount rate is calculated for each of six product categories. The discount rate for a product category may be used as a guideline for discounting every service in the product category. The calculation of the discount rates complies with Section 242(d) of the Federal Telecommunications Act that states, "a state commission shall determine wholesale rates on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection and other costs that will be avoided by the local exchange carrier." The discount rates calculated in this study reflect the avoided costs.

#### II. DESCRIPTION OF SERVICE

#### **Product Categories**

The wholesale services are split into six product categories.

Products that are available for resale:

Category 1. Basic Exchange Business, PBX Business Basic Exchange PBX Trunks

Category 2. ISDN, ACS
Integrated Services Digital Network
Advanced Communication Service

Category 3. TOLL MTS WATS 800 Service

Category 4. Listing, CO Features, Information Services
Listing Services
Information Services
Central Office Features

# Products that are not available for resale:

Category 5. Basic Exchange - Residence Residence Basic Exchange

Category 6. Private Line Private Line

# System Charge

nourcouring charge billed on a per line basis provisioning and repair associated with wholesale products. The system charge recovers the investments for the new systems required for billing. The system charge is a

# IL STUDY METHODOLOGY

GENERAL

avoided cost and subtract the avoided cost from the retail rate. offered on a wholesale basis to resellers. The basic idea from the Act is to calculate the This study calculates the discount rate that is applied to retail rates when services are

For example, assume we are evaluating a single service. The service has a cost of \$1.00, an avoided cost of \$0.20 and a retail price of \$2.00. According to the Act, the wholesale price equals the retail price minus the avoided cost or:

the percent retail markup over costs. Using our example, the percent cost difference is the evoided cost divided by the retail cost. COS This study accomplishes this by calculating the percent difference in retail and wholesale This study then calculates the discount rate using the percent cost difference and

retail cost divided by the retail cost. The percent retail markup over costs for the retail product is the retail price minus the

Percent Retail Markup. The Wholessie Discount Rate equals the percent cost difference divided by one plus the (4) Wholesale Discount Rate = 20% / (1 + 100%) = 10%

The Wholesale Discount Rate is then used to calculate the Wholesale Price yielding the same result as equation (1). The Wholesale Price equals the retail price minus the quantity of wholesale discount rate times the retail price

(5) Wholesale Price =  $$2.00 - (10\% \times $2.00) = $1.80$ 

The process described is one way to analyze each service and service element. This cost study, however, analyzes large groups of services. A discount rate is calculated not for each service but for each category of services. To accomplish this a slightly different procedure is followed to arrive at the same answer. Most of the costs that are identified as avoided are included in U S West's expense related annual cost factors. This study, thus, develops relationships of annual cost factors to calculate the wholesale discount rate not for individual services but for large categories of services. The services in each category have similar expense factor characteristics. Briefly, the process is as follows:

- A. Identify retail cost elements and classify as required or avoided for the wholesale equivalent of the service.
- B. Adjust annual cost factors to reflect avoided and new costs associated with wholesale products.
- C. Calculate the percent wholesale cost difference by adjusting the retail costs using the revised annual cost factors.
- D. Calculate percent markup over costs by product category based on product revenues and costs.
- E. Calculate the discount rates by applying the percent cost difference to the product category markup over costs.

This process is described in detail in sections A through E, below. Section F describes the process to calculate the nonrecurring systems charge cost.

#### A. Identify cost elements and classify as required or avoided.

#### 1. TSLRIC

TSLRIC is defined in Section IV. Some retail TSLRIC will be avoided if services are sold to resellers. The expenses included in TSLRIC and status

for wholesale and retail services are as follows:

#### a) Capital Costs.

These are the capital cost of plant equipment and facilities used to provide the services. This includes depreciation, cost of money, Ad Valorem taxes and income taxes. These costs will not change for services sold to resellers.

#### b) Maintenance Expenses

Maintenance expenses are the recurring costs associated with keeping facilities and equipment in good working order, such as the repair of switching equipment. This study assumes that resellers would want the equipment used for their services to be of the same working condition as U S West's end user customer receive. This function will be required for both retail and wholesale services.

#### c) Billing and Collection

Billing and collection is the process of preparing, rendering and collecting customer bills. Depending on the type of cost study billing and collection takes on three different forms. They are a cost per account, a billing and collection factor, and a cost per message. This study uses a cost per account for all categories except a cost per message is used for toll and a billing and collection factor is used for private line.

Billing and collection costs are partially avoided for wholesale products. Postage and stationary associated with customer billing is avoided. Remittance and inquiry is partially avoided. Live and final collections costs are totally avoided. Accounts processing is required for wholesale services. In addition for toll messages message investigation (Prebill) are required for wholesale services.

This study calculates wholesale billing and collections by recalculating the original retail costs without the avoided costs. The retail costs and wholesale billing and collection costs are converted to annual cost factors where necessary for ease of application to the product categories. The calculations are shown on pages 9 - 10 of the Work Papers.

#### d) Product Management

Product management includes 1) Rate and Tariff - Development which are the costs of providing new or revised tariff offerings, making studies in support of specific dockets and to identify and analyze costs for regulatory activities and 2) Market Forecast - Management Administration and Analysis which are the costs associated with analyzing all forecasts of current and future market conditions, presenting a detailed customer profile, establishing and tracking revenue objectives, as well as performing basic office services

Product management in a wholesale marketplace will be similar to that of the retail market. In fact it will be like the product management that U S WEST performs today in its Carrier market unit which manages wholesale services such as switched and dedicated access products. In this study U S WEST used the cost of its carrier marketing product management group. The avoided cost is thus the difference in our normal product management of retail services costs and the cost of Carrier market's product management costs

#### e) Sales Expense

These are the costs associated with performing sales contact work, servicing and implementation activities for the purpose of selling product and services to accounts in a particular market or segment. These costs will be avoided for the wholesale products included in this study

#### f) Sales Compensation

Sales compensation is the compensation paid to sales personnel for selling. These costs will be avoided for the wholesale products included in this study.

#### g) Product Advertising Expense

Product advertising expense includes costs incurred in developing and implementing promotional strategies to stimulate the purchase of products and services. This excludes non product related advertising, such as corporate image, stock and bond issue and employment advertisements, which is included in the appropriate functional accounts. Product advertising is not normally included in U S West's TSLRIC studies. Product managers, however, consider the cost of product advertising when making pricing decisions. This study adds product advertising expenses to the direct costs of the retail service. Product advertising is avoided for wholesale services

#### 2. Shared Costs

Shared costs is defined in Section IV. Shared costs include administrative expenses and business fees. Business fees are a tax on revenues; therefore, they will be assessed on all retail and wholesale services. U S WEST calculates administrative expenses with an Administrative Expense annual cost factor. Some administrative expenses will be avoided for the wholesale products included in this study. The following is a list of functions included in administrative expenses and their status with respect to retail and wholesale services:

#### a) Number Service

Includes amounts payable to other telecommunications companies and amounts receivable from other telecommunication companies for their portion of joint number services expenses. Number services will continue to support both retail and wholesale services.

#### b) Customer Accounting Operations

These are expenses associated with preparing manual data for CRIS, processing service orders after receipt in the accounting office, centralized mail remittance operations as well as basic office services, general supervision, support and education training for such activities. Many of these functions are usually done on mechanized basis. These costs are for those that dropped out of system and had to be performed manually. This function will be required for both retail and wholesale services.

#### c) Service Center Operations

Service Center Operations expenses are the general administrative costs associated with customer service centers, customer point of contact, service order processing, billing inquiry, sales and service, and support services. These cost are over and above direct costs for billing and collection, service order processing, and customer contact. This function will be required for both retail and wholesale services.

#### d) Customer Instruction

Includes costs associated with providing instructions, within a consolidated training environment, which benefit specific job functions performed in an entity of the residence segment. Some small business training is also included here. This function will be required for retail services; however, it will not be required for wholesale services.

#### e) Regulatory and Government Relations

These are the costs of preparing statements for specific dockets, presenting material to support company position relative to tariff filing, developing economic models and coordinating with civil defense groups in providing protection. This function will be required for both retail and wholesale services. This filing is an example of this cost.

#### f) Information Management

These are costs associated with the planning of information systems, negotiating and administering contracts associated with the purchase, lease or rental of computer hardware and associated software packages required for specific projects and programming, analyzing system design activities. This supports all services These expenses are required for both retail and wholesale services.

#### g) EDP Operations

Costs associated with console operations, peripheral device operations, tape library operations, scheduling and I/O control, and other EDP associated equipment operations as well as EDP technical assistance. This supports all services These expenses are required for both retail and wholesale services

#### h) General Purpose Computers Expense

Includes the costs of renting, maintaining and repairing general purpose computers. This supports all services. These expenses are required for both retail and wholesale services.

#### i) Furniture

This includes furniture expenses associated with all other administrative functions. These expenses are required for both retail and wholesale services.

#### j) Office Equipment Expense

Included are arrangements and inventory, interior planning and design, and coordination of office moves associated with office equipment that supports other administrative functions. These expenses are required for both retail and wholesale services.

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#### k) Network Support Expense

Network support expense includes costs of fuel, lubrications, license and inspection fees, washing, repainting, and minor accessories. Also included are the costs of personnel whose principal job is operating motor vehicles and special purpose vehicles. This includes the cost of garage shop equipment. This includes only the motor vehicle expenses that support other administrative functions. This function will be required for both retail and wholesale services

#### l) Uncollectible Revenue

This includes revenues for which no accrual is made. This includes both end user and carrier access uncollectible revenues. U S WEST assumed for the services included in this study that the rate of uncollectibles for carrier access would be the same as that for wholesale services. The administrative annual cost factor was thus adjusted to avoid recovery of end user uncollectibles for wholesale services.

#### 3. Common Costs

Common costs are defined in Section IV. Common costs are not caused due specific products or specific product families. Common costs are thus not avoided when a product is resold

#### 4. Summary of Avoided Costs

	Retail	Wholesale
TSLRIC		
Capital Costs of Plant Equipment and Facilities	Required	Required
Maintenance	Required	Required
Billing and Collection	Required	Partially Avoided
Product Management	Required	Partially Avoided
Sales Expense	Required	Avoided
Sales Compensation	Required	Avoided
Product Advertising	Required	Avoided
Shared Costs		
Number service	Required	Required
Customer Accounting Operations	Required	Required
Service Center Operations	Required	Required
Customer Instruction	Required	Avoided
Regulatory and Government Relations	Required	Required
Information Management	Required	Required
EDP Operations	Required	Required
General Purpose Computers	Required	Required
Furniture	Required	Required
Office Equipment	Required	Required
Network Support	Required	Required
Uncollectible Revenue	Required	Partially Avoided
Common Costs	Required	Required

#### B. Adjust annual cost factors to reflect avoided and new costs.

The study does not calculate the actual cost of wholesale services. The annual costs factors used to calculate costs are adjusted to reflect the avoided costs that are described in Section A, above. The annual costs were recalculated excluding the avoided costs using the normal procedure to calculate annual cost factors. See page 13-15 of Work Papers for summary of factors. See the calculations on the bottom of pages 3-8 of the Work Papers.

## C. Calculate the percent wholesale cost difference by adjusting the retail costs using the revised annual cost factors.

The study assumed all services within a product category would use the same expense annual cost factors. The study then assumed one retail unit would represent the capital

costs and maintenance expenses for any service within the group. The study then applied the annual cost factors to the one retail unit. The study used the results to develop a ratio to the total cost for each expense item. For the retail service, all of the ratios would then add to 1.0. The next step in the calculation of the wholesale cost difference was to calculate the percent change in the factor. This percent change was then applied to the retail ratios. The sum of the wholesale cost ratios was subtracted from the sum of the retail cost ratios to calculate the wholesale cost differences. See pages 3-8 of Work Papers.

#### Calculation of Retail Units

Retail Units = Retail Annual Cost Factor X One Unit

#### Calculation of Retail Ratio of Units to Total Units

```
Retail Ratio
of Units to = Retail Units / Total Retail Units
Total Units
```

#### Calculation of Wholesale Ratio of Units to Total Units

```
Wholesale
Ratio of
Units to

Total Units

Wholesale / Retail Ratio of
Factor

Factor

Retail Ratio of
Units to Total
Units
```

#### Calculation of Percent Cost Difference:

Percent Total of Retail Total of Wholesale

Cost = Ratios of Units to Total

Difference Total Units Units

Total of Wholesale

Ratios of Units to Total

Units

## D. Calculate percent markup over costs by product category based on product revenues and costs.

This study calculates the percent markup for the six product categories based on existing rate, revenue and cost data for the retail products included in each category. The percent markup equals the difference of the total annual revenues and the total annual TSLRIC and Shared Costs (SC) divided by the total annual TSLRIC and SC.

The percent markup for ISDN category equals the difference of the unit revenues and the

unit TSLRIC and Shared Costs (SC) divided by the unit TSLRIC and SC. The unit used is the ISDN Single Line Service Measured - with Usage.

The toll calling plan with the lowest percent market up over costs was used to represent the Toll category. All of service categories included data that represented at least 90% of the retail revenues for the category, except for ISDN. See pages 20-27 of Work Papers.

#### Calculation of Percent Markup:

## E. Calculate discount rates by applying the percent cost difference to the product category markup over costs.

This study calculates a discount rate for each of the six product categories. The discount rate for a product category may be used as a guideline for discounting every service in the product category. Based on the Federal Telecommunications Act as quoted in Section I, the avoided costs should be subtracted from the retail rate to calculate the wholesale rate. This study calculates a discount rate to accomplish this.

This study calculates the discount rate by dividing the percent difference in costs by one plus the percent markup. See pages 1-2 of Work Papers.

#### Calculation of Discount Rate:

Discount Rate = Percent Difference in Costs / (1 + Percent Markup)

#### F. Calculated the nonrecurring Systems Charge cost.

To operate in a wholesale environment new systems are needed for billing, provisioning and repair. These systems are in addition to the other systems that are used for wholesale services that are reflected in the recurring costs calculated in this study. The cost of deploying these new systems is recovered with a nonrecurring Systems Charge for each line sold to resellers. This study calculates the Net Present Value (NPV) of the annual costs and investments associated with the new systems. See pages 16-19 of Work Papers.

#### IV. DESCRIPTION OF TSLRIC

U S West Communications uses an incremental method to estimate product and service costs. It provides a measurement of costs over a period of time long enough to fully adjust to change in output. This methodology is forward looking and it does not measure historic investment decisions of the corporation.

The U S WEST incremental format desegregates the cost results on a unitized basis into the components shown below

Total Service Long Run Incremental Cost (TSLRIC) — Total Service Long Run Incremental cost is the forward-looking cost avoided (or added) by discontinuing (or offering) an entire service or group of services in the most efficient manner, holding constant the production of all other services produced by the firm. This cost is often referred to in economic terms as the *direct* cost.

Shared Cost (SC) — The cost associated with the provision of multiple services (service family). This cost is not volume sensitive and is eliminated only if the entire service family is discontinued.

Total Service Long Run Incremental Costs plus Shared Costs (TSLRIC + SC) — The total Service Long Run Incremental Costs for a service plus the Shared Costs of a family of services

Common Cost (CC)—The current cost incurred for the benefit of the enterprise as a whole. This cost does not vary with the provision of a service or a service family. These costs are sometimes referred to as general overhead costs. The Common Cost added to the TSLRIC + SC produces a Fully Allocated Cost(FAC) as required by commission rules.

Typically, the costs identified by these cost categories include capital costs for depreciation, return, and income taxes. TSLRIC also includes ongoing operating costs for: maintenance expense, assignable administration expense, product management expense, pre sales expense, sales compensation expense, expensed right to use fees, ad Valorem taxes and business fees

#### V. STUDY ASSUMPTIONS

- Billing and Collections expenses were based on the best estimates available using current billing and collections expenses. Resale expenses include electronic transfer of all-required information by category to the reseller and other expenses considered appropriate.
- The costs for categories one through five used in calculating a billing and collection factor were a 1995 or 1996 U S West average.
- The percent markups calculation used annual revenue data from 1995.
- TSLRIC and Shared Costs data used in the calculation of percent markups was
  from the latest available cost study. The data includes both 1995 and 1996 data.
  All line costs were 1996 costs
- The markup for the Features category used the top 10 Revenue generating feature USOC's
- Markup rate, demand and revenue data is from TRAQRS for Basic Exchange Residence and Business, and PBX. The Toll usage data is from TUT and the
   Features data is from CDW
- The markup for ISDN, ACS category used the U S West average TSLRIC+SC costs from studies completed in 1995 and 1996. The U S West average tariff rate was used as the revenue from states where ISDN is in effect. The ISDN service used was the Single Line Measured Service with Usage.

#### VL STUDY SUMMARY

Study Name	Colorado Avoidable Cost			
Study Requester				
Type of Study	(TSLRIC) Total Service Lon	(TSLRIC) Total Service Long Run Incremental Costs		
Product or Service Name	Avoidable Cost			
Study Applications	Avoidable Support for wholesale prices			
Completion Date	July 1, 1996			
Cost Analyst	Ed Freye and Brian Farrow			
Study Review	Reviewer	Reviewer Date		
Cost Models Used	Model Ve		rsion/Release Date	
	Spreadsheets	preadsheets		
			1	
Cost Factors Used	Pactor	······································	Effective Date	
	Capital Recovery		na	
	Maintenance		na	
	Administration - Assignable	!	na	
The state of the s	Product Management		5/96	
	Sales		5/96	
	Compensation		5/96	
	Ad Valorem		na	
	Business Fees		5/96	
	Power		na	
	Sales Tax		na	
	Interest During Construction		na	
ASSESSMENT OF THE PROPERTY OF	Land			
in a second seco	Building			
	Supply	The state of the s		
	Telco			
	Structure Ratio		na	
(Art 1943) 1-460 Art (Art 1945) Art (Art 1	Capacity, Fills		na	
	Common Cost			
Labor Rates			na	
Cost of Money	Combined	Combined		
Inflation	Telephone Plant Index	Telephone Plant Index		
Major Cost Drivers	Avoidable expenses			